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(54) **IDENTIFYING AND TRACKING OBJECTS VIA LIGHTING PATTERNS**

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(57) **ABSTRACT**

Techniques and systems for tracking multiple objects over a common time period and identifying (i.e., disambiguating) the objects from one another. As described herein, each object may include a respective light source (e.g., one or more LEDs) that may illuminate according to a defined lighting pattern. One or more cameras may capture images of a scene that includes the objects and the images may be analyzed to identify a location of each respective light source within the scene. By identifying these locations over multiple images, the movement of each object may be determined. In some instances, a system that tracks the movement of the objects may iterate through instructing each of the objects to illuminate its light source according to an identification lighting pattern, while other light source(s) of the other respective object(s) continue illuminating their light sources according to a default lighting pattern.